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PATENT
Attorney Docket No. ASC-043

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Eugene A. Fitzgerald and Nicole Gerrish
SERIAL NO.: 09/884,517 GROUP NO.: 2822
FILING DATE: June 19, 2001 EXAMINER: Ken Pierre
TITLE: CMOS INVERTER AND INTEGRATED CIRCUITS UTILIZING
STRAINED SILICON SURFACE CHANNEL MOSFETS

Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO OFFICE ACTION

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Sir:

This paper is filed in response to the Office Action mailed on May 7, 2002.

In the Office Action, the Examiner rejected claims 1-27 under 35 U.S.C. §103(a) over Ismail et al. in view of Armstrong. In explaining the relevance of Ismail et al. to the claims, the Examiner does not contend that the reference discloses a CMOS device in which the channels of both a p transistor and an n transistor are defined in *the same strained surface layer* of the heterostructure in which the transistors are formed.

In fact, Ismail et al. do not even show p and n channels defined in the same layer, much less in a strained surface layer as required by the present claims. With reference to Fig. 2 of Ismail et al., their p channel is layer 30 and their n channel is layer 32; see col. 5, lines 33-37; and col. 6, lines 6-16.

The ability to define p and n channels in a single strained surface layer represents a critical aspect of the invention. As explained in the application, this allows device

performance to be improved at a constant gate length and without adding complexity to circuit fabrication or design. (Specification at page 3, lines 20-22.)


The courts have repeatedly and consistently held that "all limitations [of a claim] must be considered ... and it is error to ignore specific limitations in distinguishing over the references." In re Boe and Duke, 184 USPQ 38, 40 (CCPA 1974). We submit that no art of record discloses or suggests a device having transistor p and n channels in a single strained surface layer, and that the claims are therefore patentable.

Please charge any fee occasioned by this paper to our Deposit Account No. 20-0531.

Respectfully submitted,

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